

REMARKS/ARGUMENTS

Claims 1 – 20 are pending in the present application. All of the claims are rejected under 35 U.S.C. § 101. Claims 1 - 4, 6, 8 - 10, and 12 – 20 are amended. New claims 21 – 23 are added. No new matter is added.

All of the claims have been rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter. However, there has been no substantive review of the claim elements in light of the Examiner's search results that identified three prior art references. Applicant traverses the Examiner's assessment that claims 1 - 20 are directed to non-statutory subject matter for the reasons stated below.

Applicant's claims 1 – 13 are directed to methods that are employed in a physical apparatus that determines delays and gains for a received multi-path signal based on calculations related to propagation paths of the received signal. A physical signal is received in the described method. The received signal is processed to determine the delays and gains associated with the received signals from different propagation paths, as recited in claims 1 – 13. Delay and gain are relative measurements between a transmitter and a receiver, and the delay measurement or determination is not inherently known and must be determined through calculations related to the physically received signal. Also, gain is not an inherent property of a propagation path and is instead a characteristic of a physical system such as an antenna, a receiver, and other components used in a mobile device or a base station device. The calculations of delays and gains associated with a propagation path for multi-path signals that are received are useful, concrete and tangible results.

Claim 1 of the prior art reference to Bottomley et al. (US 2004/0213363), which was cited by the Examiner, is directed to a method of estimating delay values in a multi-path communication signal, which only requires that the method steps be performed without any requirement of structural limitation. The other prior art references to Lucas (US 5,448,600) and Sourour (US 6,865,218) similarly include method claims that do not require structural limitations. Based on the review of the Examiner's cited prior art it is entirely unclear as to how the cited references are statutory subject matter while Applicant's claimed invention is non-statutory.

Applicant's originally presented claims 14 – 20 are directed to an apparatus that includes physical elements that have not been reviewed by the Examiner. For example, claim 14 recites “means for correlation data”, “means for repeating the correlation ...”, “means for coherently accumulating results ...”, “means for calculating the square magnitudes ...”, and “means for comparing...” None of the claim elements for claim 14 have been substantively reviewed and instead have been summarily dismissed as non-statutory subject matter. Since Claim 14, and dependent claims 15 – 20 are apparatus claims, it is entirely unclear as to how they are non-statutory.

Applicant has reviewed the claims in detail and made clarifying amendments without changing the scope of that which is claimed. Independent claims 1, 9 and 14 now clearly describe that the methods and apparatuses are for multi-path searching such as in a mobile device or other physical apparatus. The other amendments to claims 2 - 4, 6, 8, 10, 12, 13 and 15 – 20 are made after carefully reviewing the claim language for proper antecedence and other infelicities,

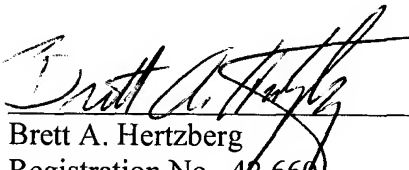
and are not made to overcome any basis of rejection. New claims 21 – 23 are supported in the text of the originally filed specification, and are included to further illustrate tangible applications of that which is claimed. Since none of the claims have been substantively reviewed, there is no further burden presented in the Examination process as a result of the present amendments.

In view of the foregoing amendments and remarks, all pending claims are believed to be properly supported as statutory subject matter is in proper condition for allowance. Therefore, a Notice of Allowance is respectfully requested. Should the Examiner have any further issues regarding this application, the Examiner is requested to contact the undersigned attorney for the applicants at the telephone number provided below.

Respectfully submitted,

MERCHANT & GOULD P.C.
P. O. Box 2903
Minneapolis, Minnesota 55402-0903
206.342.6200




Brett A. Hertzberg
Registration No. 42,660
Direct Dial: 206.342.6255